

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 4-17, 26-29, 31-40, 49, and 51-82 are pending in the application, with 1, 26, 49, 53, 57, and 61 being the independent claims. Claim 36 is amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowable Subject Matter

Applicants acknowledge with appreciation the Examiner's indication that claims 53-60, 79, and 80 are allowed, and that claims 9-12, 35-38, and 68-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

In paragraph 2 of the Office Action, claim 36 was objected to because at "line 2, "ffirst" should be changed to - first --." Applicants have amended claim 36 above to correct this typographical error. As such, Applicants respectfully request that this objection to claim 36 be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 102

In paragraph 4 of the Office Action, claims 1, 5-7, 13-17, 26-29, 31-33, 39, 40, 49, 51, 61, 64-66, 72-78, 81, and 82 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,250,458 to Richmond *et al.* (hereinafter Richmond). Applicants respectfully traverse this rejection.

Technical differences exist between Richmond and the claimed embodiments of the present invention. FIG. 2 of Richmond shows a potentiometer coupled to an output of an operational amplifier 30. Richmond states the operational amplifier 30 is "configured as an integrating inverting operational amplifier by the feedback capacitor" (col. 6, lines 16-20). Richmond further states "[t]he output of the amplifier 30 is a negative feedback signal which is first scaled by the potentiometer, and coupled to summing junction 21 to cancel the DC offset" (col. 6, lines 31-34).

Thus, the potentiometer of Richmond is used to scale the output of amplifier 30. This is very different from the claimed embodiments of the present invention. Claim 1 recites an integrator that has a time constant that is variable according to at least one control signal to vary a frequency response of the integrator. *The potentiometer of Richmond is used to scale the output of amplifier 30, **not** to vary how amplifier 30 responds to frequency.* Thus, Richmond does not teach or suggest an integrator that has a time constant that is variable according to at least one control signal to vary a frequency response of the integrator, as recited in claim 1.

Thus, Applicants assert that claim 1 is patentable over Richmond for at least the reasons described above. Furthermore, independent claims 26, 49, and 61, are also patentable over Richmond for at least these reasons, and further in view of their own features. Claims 5-7, 13-17, 27-29, 31-33, 39, 40, 51, 64-66, 72-78, 81, and 82, which

depend from independent claims 1, 26, 49, and 61, are also patentable over Richmond for the reasons describe above, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

Claims 2, 4, 27, 52, 62, and 63

In paragraph 7 of the Office Action, claims 2, 4, 27, 52, 62, and 63 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Richmond. Applicants respectfully traverse this rejection.

As described above, independent claims 1, 26, 49, and 61 are patentable over Richmond for at least the reasons mentioned above. Applicants assert that claims 2, 4, 27, 52, 62, and 63, which depend from independent claims 1, 26, 49, and 61, are also patentable over Richmond for the reasons described above, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

Claims 8, 34, and 67

In paragraph 8 of the Office Action, claims 8, 34, and 67 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Richmond in view of U.S. Patent No. 6,204,789 to Nagata (hereinafter Nagata). Applicants respectfully traverse this rejection.

As described above, independent claims 1, 26, and 61 are patentable over Richmond for at least the reasons mentioned above. Furthermore, Applicants assert that Nagata does not provide the teachings or suggestion missing from Richmond. Thus,

Applicants assert that independent claims 1, 26, and 61 are patentable over Richmond and Nagata, alone or in combination, for at least the reasons described above.

Furthermore, Applicants assert that claims 8, 34, and 67, which depend indirectly from independent claims 1, 26, and 61, respectively, are also patentable over Richmond and Nagata, alone or in combination, for the reasons described above, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Mr. J. W.", is written over a horizontal line.

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